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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,662	06/29/2001	Christian Hardy	SCHN : 003	9379

7590 09/08/2004

PARKHURST & WENDEL, L.L.P.
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EXAMINER

LIN, WEN TAI

ART UNIT PAPER NUMBER

2154

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/893,662	Applicant(s) HARDY ET AL.	
	Examiner Wen-Tai Lin	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9, 12 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 5, 7-8, 10-11 and 13-14 is/are objected to.
- 8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/29/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-17 are presented for examination.

ELECTION/RESTRICTIONS

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Claim 1-15, drawn to a system designed for communicating between a controller and a remote network node using client-server model, classified in class 709, subclass 203.

Claims 16-17, drawn to a programming environment or tool for designing a system having web client and server functions as program modules, classified in class 717, subclass 106+.

The inventions are distinct, each from the other because Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as providing a programming station for application programs having client and server functional blocks as basic constructs. See MPEP 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction

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for examination purposes as indicated is proper. Due to the fact that Applicant has not been notified for an election to the above restriction requirement, Applicant only needs to respond to the following prior art rejections for the elected group of claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Papadopoulos et al.[U.S. Pat. No. 6061603].

7. As to claims 1-3 and 15, Papadopoulos teaches the invention as claimed including: a communication system for automation equipment acting on a TCP/IP network in which the automation equipment controls an automation application by executing an application program written in one or several languages according to standard IEC

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1131-3 [Abstract; Fig.3] characterised by the fact that the communication system comprises:

exchange means for implementing a WEB server function [60, Fig.3] or a WEB client function [58, Fig.3] inside an application program, these exchange means comprising at least one WEB function block that can interact with the application program, an HTTP interface [62, Fig.3] in the automation equipment [6, Fig.1] capable of routing messages from the TCP/IP network to a WEB function block identified by a URL address, and routing messages from a WEB function block in the automation equipment to a URL address on the TCP/IP network [col.5, lines 24-43].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4, 6, 9, 12 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos et al.(hereafter "Papadopoulos")[U.S. Pat. No. 6061603], as applied to claims 1-3 and 15 above.

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10. As to claims 4 and 6, Papadopoulos does not specifically teach teaches that a WEB function block comprises a generic program code and configuration data that are specific to each WEB function block, wherein the configuration data is maintained in text form.

However, under the notion of object-oriented programming, it is well known to define a set of common program codes as common objects, while leaving the variations as associated objects for composing various target program modules. Since Papadopoulos's client task and server task both have core functions such as interacting with the HTTP task as well as the back plane driver, it is obvious that an ordinary skill in the art of programming would define core interface routines as common communication routines, while leaving some variations or parameters defined in configuration files in text form, because it is easier to maintain the programs and configuration data by constructing and modularizing an application program with a generic program code and writing the configuration data in text form (e.g., for easier editing).

11. As to claims 9 and 12, Papadopoulos does not specifically teach that the contents of an HTTP request or an HTTP answer is an XML frame.

However, it is well known that HTML, XML formats or URL encoded string (e.g., URI) are well suited for HTTP. It is obvious to one of ordinary skill in the art that Papadopoulos's HTTP request or an HTTP answer may be formed as XML file for URL encoded frames because this is an obvious design option.

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12. As to claims 16-17, Papadopoulos does not specifically teach which or what type of programming station used to design the underlying application program of automation equipment.

However, it is well known in the art that a wide variety of programming environment/tools are made available for system programmers. It is obvious that that Papadopoulos's system could have relied on some programming station (such as a graphical design tool running on a PC) with editing tool to display, insert, delete and modify the client and sever tasks, which are integrated into an application program and set parameters for configuration data in text form because such a visual system aid could improve the programming and debugging phase of the application development [Note that the fact that Papadopoulos has resulted in a successful design as mentioned above is an evidence that at least some compiler running in a computer must have been utilized]. Further, it is also well known to use library functions as part of an application program. It would have been obvious for designers of Papadopoulos's system to have used preconfigured WEB function block libraries that can be memorized and manipulated starting from the programming station and include sets of WEB function blocks specialized in a type of content and/or protocol implemented using HTTP because the approach could substantially reduce the design cycle and improve in the debugging phase of the application development.

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13. Claims 5, 7-8, 10-11 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Papadopoulos et al. [U.S. Pat. No. 6282454];

Venkatraman et al. [U.S. Pat. No. 6170007];

Brault [U.S. PGPub 20010014833]; and

Austin [U.S. Pat. No. 6370569].

15. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 days from the mail date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C. 133, M.P.E.P. 710.02, 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen-Tai Lin whose telephone number is (703)305-4875. The examiner can normally be reached on Monday-Friday (8:00-5:00) .

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone

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numbers for the organization where this application or proceeding is assigned are as follows:

(703)872-9306 for official communications; and

(703)746-5516 for status inquires draft communication.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Wen-Tai Lin

September 7, 2004

Wen-Tai Lin
9/7/04